

**C. perfringens Sporulation HiVeg™ Broth****MV947**

C.perfringens Sporulation HiVeg Broth is used for promoting sporulation in *Clostridium perfringens*.

**Composition \*\* :**

Ingredients	Grams/Litre
HiVeg hydrolysate No. 1	15.0
Yeast extract	3.0
Starch, soluble	3.0
Magnesium sulphate	0.1
Sodium thioglycollate	1.0
Disodium phosphate	11.0

Final pH (at 25°C )  $7.8 \pm 0.2$

\*\* Formula adjusted, standardized to suit performance parameters.

**Directions :**

Suspend 33.1 grams in 1000 ml distilled water. Heat if necessary to ensure complete solution. Dispense 20 ml amounts in 20 X 150 mm screw capped test tubes. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Just before use heat the medium in flowing steam for 20 minutes.

**Principle and Interpretation :**

This medium is prepared by using HiVeg hydrolysate No.1 (vegetable origin) in place of Tryptose (animal origin), thus making the medium free of BSE/TSE risks. C. perfringens Sporulation HiVeg Broth is the modification of C. perfringens Sporulation Broth which is formulated as per APHA (1) for enhancing sporulation in *Clostridium perfringens*. The medium contains ingredients like HiVeg hydrolysate No.1, yeast extract and starch which not only support the growth of *Clostridium perfringens* but also stimulate spore formation in presence of magnesium sulphate. Sodium thioglycollate in the medium helps to maintain anaerobic condition. Magnesium sulphate and disodium phosphate provide ions to the organism and helps in maintaining buffering conditions in the medium.

**Quality Control :****Appearance of powder**

Light yellow coloured, may have slightly greenish tinge, homogeneous, free flowing powder.

**Colour and Clarity**

Medium amber coloured, clear to slightly opalescent solution with a slight precipitate.

**Reaction**

Reaction of 3.31% w/v aqueous solution is pH  $7.8 \pm 0.2$  at 25°C

**Product Profile :**

Vegetable based (Code MV)Ⓢ	Animal based (Code M)
MV947	M947
HiVeg hydrolysate No. 1	Tryptose

**Recommended for** : Promoting sporulation in *Clostridium perfringens*.

**Reconstitution** : 33.1 g/l

**Quantity on preparation (500g):** 15.1 L

**pH (25°C)** :  $7.8 \pm 0.2$

**Supplement** : None

**Sterilization** : 121°C / 15 minutes.

**Storage** : Dry Medium - Below 30°C, Prepared Medium 2 - 8°C.

**Cultural Response**

Cultural characteristics observed after an incubation at 35-37°C for 24-48 hours under anaerobic conditions.

Organisms (ATCC)	Inoculum (CFU)	Growth	Sporulation
<i>Clostridium perfringens</i> (12924)	$10^2$ - $10^3$	luxuriant	+

**References :**

- Vanderzant C and Splittstoesser (Eds.), 1992, Compendium of Methods For The Microbiological Examination of Foods, 3<sup>rd</sup> ed., APHA, Washington, D.C.

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- Control
- Clostridium perfringens*